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IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1   1.   (original) A method for registering at least one access point with a gateway in a
2   network, comprising:
3   broadcasting from a gateway, a discovery message to said at least one access
4   point in said network;
5   receiving from at least one access point receiving said discovery message, an
6   access point registration request comprising access point location, IP address, MAC
7   address, radio type, and power level information of said access point; and
8   storing said access point registration request information at said gateway.

1   2.   (original) The method of claim 1, wherein each access point selects a random
2   delay prior to sending said access point registration request to said broadcasting gateway.

1   3.   (original) A method for registering at least one access point with a gateway in a
2   network, comprising:
3   broadcasting a gateway discovery query message from said at least one access
4   point;
5   receiving from said at least one gateway, a respective service discovery message;
6   selecting an appropriate gateway in an instance where more than one service
7   discovery message is received; and
8   sending an access point registration request comprising access point location, IP
9   address, MAC address, radio type, and power level information of said access point to
10   said selected gateway.

1   4.   (original) The method of claim 3, wherein said selecting further comprises:
2   determining if said access point is currently registered; and

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3   sending said service discovery message to said access point.

1   5.   (original) The method of claim 3, wherein said selecting comprises:

2   determining an appropriate gateway using at least one of the following: a cost of

3   using a gateway, a load at a gateway, and system features provided by a gateway.

1   6.   (original) The method of claim 3, wherein said sending an access point

2   registration request further comprises sending security information in said access point

3   registration request.

1   7.   (original) The method of claim 6, wherein each access point selects a random

2   delay prior to sending said access point registration request to said gateway.

1   8.   (withdrawn) A method of providing data services for a mobile host roaming

2   between access points associated with different gateways, comprising:

3   receiving wireless services from a first access point associated with a first

4   gateway;

5   sending a message to said first gateway indicating that said mobile host is

6   receiving signals from a second access point associated with a second gateway;

7   sending a request to be switched to said second access point to enable thereby a

8   registration with said second gateway; and

9   receiving buffered packetized information from said first gateway.

1   9.   (withdrawn) The method of claim 8, wherein said message to said first gateway

2   comprises a layer-3 type message.

1   10.   (withdrawn) The method of claim 8, wherein said sending said buffered

2   packetized information comprises:

3   sending a message from said second gateway to said first gateway instructing said

4   first gateway to forward said buffered packetized information to said second gateway;

5   and

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6   sending said buffered packetized information from said second gateway.

1   11.   (withdrawn) The method of claim 10, further comprising:

2   instructing said first gateway to terminate wireless services from a first access

3 point associated with a first gateway.

1   12.   (withdrawn) A method for providing wireless communications for at least one

2 mobile host in a wireless network environment using a communications protocol

3 comprising an access point location, an access point Internet protocol (IP) address, a

4 media access control (MAC) address, a number of access point radios, a radio type

5 protocol of each access point radio, a radio power level indicator, said method

6 comprising:

7   associating a mobile host with an access point;

8   registering said mobile host with a gateway via said communications protocol;

9 and

10   providing data communications services to said mobile host through said gateway.

1   13.   (withdrawn) The method of claim 12, wherein said providing data

2 communications services comprises:

3   sending a request for services to a gateway including at least one level of quality-

4 of-service (QoS) related features.

1   14.   (withdrawn) The method of claim 13, wherein said quality-of-service (QoS)

2 related features comprise at least one of a constant bit rate (CBR), a variable bit rate

3 (VBR), a real-time variable bit rate (VBR-rt), a controlled load, a guarantee service, and a

4 best effort service.

1   15.   (withdrawn) A method of providing load balancing for data services for a

2 plurality of mobile hosts, comprising:

3   receiving a wireless service request from a first transceiver associated with a first

4 mobile host;

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5   determining bandwidth capacity for said first transceiver;

6   sending a wireless service rejection message to said first mobile host via said first

7 transceiver in an instance where said bandwidth capacity has exceeded a predetermined

8 threshold;

9   receiving a wireless service request from a second transceiver associated with said

10 first mobile host;

11   determining bandwidth capacity for said second transceiver; and

12   sending a wireless service acceptance message to said first mobile host via said

13 second transceiver in an instance where said bandwidth capacity is less than said

14 predetermined threshold.

1   16.   (withdrawn) The method of claim 15, further comprising:

2   providing information to said first mobile host via said second transceiver.

1   17.   (withdrawn) The method of claim 15, wherein said first and second transceivers

2 are respectively associated with first and second access points.

1   18.   (withdrawn) The method of claim 15, wherein said first and second transceivers

2 are associated with a common access point.

1   19.   (withdrawn) In a communications system for providing information, a computer

2 readable medium in a general purpose computer system that operates as a special purpose

3 controller when executing at least one program for broadcasting said information, a

4 communications protocol comprising:

5   an access point location;

6   an access point Internet protocol (IP) address;

7   a media access control (MAC) address;

8   number of access point radios; and

9   radio type protocol of each access point radio.

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1 20.   (withdrawn) The computer readable medium of claim 19, wherein said
2 communications protocol further comprises:
3   a power level indicator of a currently utilized access point radio.

1 21.   (withdrawn) The computer readable medium of claim 19, wherein said
2 communications protocol further comprises:
3   a frequency channel of each a currently utilized access point radio.

1 22.   (withdrawn) The computer readable medium of claim 19, wherein said
2 communications protocol further comprises:
3   a lifetime indicator of a currently utilized access point radio.

1 23.   (withdrawn) The computer readable medium of claim 19, wherein said
2 communications protocol further comprises:
3   a security indicator of a currently utilized access point radio.

1 24.   (withdrawn) The computer readable medium of claim 19, wherein said access
2 point location comprises and alpha-numeric description of a hotspot associated with an
3 access point.

1 25.   (withdrawn) The computer readable medium of claim 19, wherein said access
2 protocol IP address comprises a unique IP address of said access point.

1 26.   (withdrawn) The computer readable medium of claim 19, wherein said radio type
2 protocol of each access point radio comprises at least one of a radio type selected from
3 the 802.11(a), 802.11(b), 802.11(g), and Bluetooth communication protocols.

1 27.   (withdrawn) The computer readable medium of claim 20, wherein said power
2 level indicator provides indicia of signal strength of a beacon signal of an access point
3 radio received by said mobile host.

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1 28. (withdrawn) The computer readable medium of claim 22, wherein said lifetime
2 indicator comprises indicia representing temporal connectivity between an access point
3 radio and an associated gateway.

1 29. (withdrawn) The computer readable medium of claim 23, wherein said security
2 indicator comprises privacy keys to allow an access point to communicate with said
3 associated gateway.

1 30. (withdrawn) The computer readable medium of claim 19, wherein said
2 communications protocol further comprises quality-of-service related features.

1 31. (withdrawn) The computer readable medium of claim 30, wherein said quality-of-
2 service related features comprise indicia representing apportioned bandwidth for a mobile
3 host.

1 32. (withdrawn) The computer readable medium of claim 31, wherein said quality-of-
2 service related features comprise indicia of one of a best effort and dedicated bandwidth
3 level of service.

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